CLAIMS

What is claimed is:

1. An isolated polypeptide comprising residues 114 to 370 of SEQ ID NO:2.

2. The isolated polypeptide according to claim 1 wherein the polypeptide comprises residues 114 to 378 of SEQ ID NO:2.

3. The isolated polypeptide according to claim 2 wherein the polypeptide comprises residues 50 to 378 of SEQ ID NO:2.

4. The isolated polypeptide according to claim 3 wherein the polypeptide comprises residues 26 to 378 of SEQ ID NO:2.

5. The isolated polypeptide according to claim 4 wherein the polypeptide comprises residues 1 to 378 of SEQ ID NO:2.

6. An isolated polypeptide selected from the group consisting of:

a) a polypeptide comprising residues 1 to 25 of SEQ ID NO:2;

b) a polypeptide comprising residues 26 to 49 of SEQ ID NO:2;

c) a polypeptide comprising residues 50 to 113 of SEQ ID NO:2;

d) a polypeptide comprising residues 114 to 370 of SEQ ID NO:2;

e) a polypeptide comprising residues 371 to 378 of SEQ ID NO:2; and

f) a polypeptide comprising residues 1 to 378 of SEQ ID NO:2.

7. An isolated polynucleotide encoding a polypeptide wherein the polypeptide comprises residues 114 to 370 of SEQ ID NO:2.

8. The isolated polynucleotide according to claim 7, wherein the polypeptide molecule comprises residues 114 to 378 of SEQ ID NO:2.

9. The isolated polynucleotide according to claim 8, wherein the polypeptide molecule comprises residues 50 to 378 of SEQ ID NO:2.

10. The isolated polynucleotide according to claim 9, wherein the polypeptide molecule comprises residues 26 to 378 of SEQ ID NO:2.

11. The isolated polynucleotide according to claim 8, wherein the polypeptide molecule comprises residues 1 to 378 of SEQ ID NO:2.

12. An isolated polynucleotide encoding a polypeptide molecule wherein the polypeptide is selected from the group consisting of:

a) a polypeptide comprising residues 1 to 25 of SEQ ID NO:2;

b) a polypeptide comprising residues 26 to 49 of SEQ ID NO:2;

c) a polypeptide comprising residues 50 to 113 of SEQ ID NO:2;

d) a polypeptide comprising residues 114 to 370 of SEQ ID NO:2;

e) a polypeptide comprising residues 371 to 378 of SEQ ID NO:2; and

f) a polypeptide comprising residues 1 to 378 of SEQ ID NO:2.

13. An expression vector comprising the following operably linked elements:

a transcription promoter;

a DNA segment wherein the DNA segment is a polynucleotide encoding the polypeptide of claim 1; and

a transcription terminator.

14. The expression vector according to claim 13 wherein the DNA segment contains an affinity tag.

15. A cultured cell into which has been introduced an expression vector according to claim 13, wherein said cell expresses the polypeptide encoded by the DNA segment.

16. A method of producing a polypeptide comprising culturing a cell according to claim 15, whereby said cell expresses the polypeptide encoded by the DNA segment; and recovering the polypeptide.

17. The polypeptide produced by the method of claim 16.

18. A method of producing an antibody comprising the following steps in order:

inoculating an animal with an epitope bearing portion of a polypeptide wherein the epitope bearing portion is selected from the group consisting of:

a) a polypeptide comprising residues 10 to 16 of SEQ ID NO:2;
b) a polypeptide comprising residues 52 to 61 of SEQ ID NO:2;
c) a polypeptide comprising residues 52 to 78 of SEQ ID NO:2;
d) a polypeptide comprising residues 69 to 78 of SEQ ID NO:2;
e) a polypeptide comprising residues 89 to 94 of SEQ ID NO:2;
f) a polypeptide comprising residues 89 to 117 of SEQ ID NO:2;
g) a polypeptide comprising residues 111 to 117 of SEQ ID NO:2;
h) a polypeptide comprising residues 126 to 134 of SEQ ID NO:2;
i) a polypeptide comprising residues 126 to 151 of SEQ ID NO:2;
j) a polypeptide comprising residues 143 to 151 of SEQ ID NO:2;
k) a polypeptide comprising residues 215 to 220 of SEQ ID NO:2;
l) a polypeptide comprising residues 215 to 239 of SEQ ID NO:2;
m) a polypeptide comprising residues 223 to 239 of SEQ ID NO:2;
n) a polypeptide comprising residues 223 to 257 of SEQ ID NO:2;
o) a polypeptide comprising residues 251 to 257 of SEQ ID NO:2; and
p) a polypeptide comprising residues 332 to 337 of SEQ ID NO:2

wherein the polypeptide elicits an immune response in the animal to produce the antibody; and isolating the antibody from the animal.

19. An antibody produced by the method of claim 18, which binds to a polypeptide comprising residues 114 to 370 of SEQ ID NO:2.

20. The antibody of claim 19, wherein the antibody is a monoclonal antibody.

21. The antibody of claim 19 joined to a moiety selected from the group consisting of:

a) an affinity tag;

b) a detectable molecule;

c) a cytotoxic molecule; and

d) a cytokine.

22. A method of killing cells expressing a polypeptide comprising residues 114 to 370 of SEQ ID NO:2, comprising contacting the cells with the antibody of claim 21, wherein the antibody is joined to the cytotoxic molecule.

23. A method of modulating cell-cell interactions comprising contacting the cells with polypeptide of claim 1.

24. A method for modulating cell-cell interactions according to claim 23, wherein the cells are derived from tissues selected from the group consisting of:

a) tissues from brain;

b) tissues from kidney; and

c) tissues from testis.

25. A method for modulating glycoprotein and glycolipid biosynthesis in cells, cell matrix, or cell culture comprising contacting the cells, cell culutre, or cell matrix with the polypeptide of claim 1.

26. A method for modulating glycoprotein and glycolipid biosynthesis according to claim 25, wherein the cells, cell culture or cell matrix are derived from tissues selected from the group consisting of:

a) tissues from brain;

b) tissues from kidney; and

c) tissues from testis.

27. A method of detecting a znssp6 anti-complementary molecule comprising contacting a test sample containing the znssp6 anti-complementary molecule with the polypeptide of claim 1.